

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

Claim 1 (previously presented) A large aperture retro-reflector defining a clear aperture, said retro-reflector comprising:

- A) a housing,
- B) a compound lens attached to said housing, said lens defining a focal surface represented by a locus of focal points for beams of light illuminating said retro-reflector from a range of directions of at least ± 20 degrees,
- C) a mirror element having a reflective surface co-located with or approximately co-located with said focal surface.

Claim 2 (previously presented) The retro-reflector as in Claim 1 wherein at least 75 percent of light in a predetermined wavelength range illuminating said aperture of said retro-reflector from a light source, approximating a point source, within said range of direction is reflected back toward said light source with a divergence of less than ± 1.0 degrees.

Claim 3 (previously presented) The retro-reflector as in Claim 1 wherein at least 90 percent of light in a predetermined wavelength range illuminating said aperture of said retro-reflector from a light source, approximating a point source, within said range of direction is reflected back toward said light source with a divergence of less than ± 0.001 degrees.

Claim 4 (previously presented) The retro-reflector as in Claim 1 and also comprising a modulator positioned so as to modulate light beams from an interrogating light source located at an interrogation location and a modulating means for modulating said modulator to impose communication signals on said interrogating beam to permit communication from said retro-reflector back to the interrogation location.

Claim 5 (previously presented) The retro-reflector as in Claim 4 wherein said modulator in a quantum well modulator.

Claim 6 (previously presented) The retro-reflector as in Claim 4 wherein said clear aperture defines a diameter and said lens defines a diameter and the diameter of the clear aperture is at least $1/3$ the lens diameter.

Claim 7 (previously presented) The retro-reflector as in Claim 1 and also comprising a modulator positioned so as to modulate light beams from an interrogating light source located at an interrogation location and a modulating means for modulating said modulator to impose communication signals on said interrogating beam to permit communication from said retro-reflector back to the interrogation location.

Claim 8 (previously presented) The retro-reflector as in Claim 7 wherein said modulator is a quantum well modulator.

Claim 9 (previously presented) The retro-reflector as in Claim 3 wherein said clear aperture defines a diameter and said lens defines a diameter and the diameter of the clear aperture is at least $1/3$ the lens diameter.

Claim 10 (previously presented) The retro-reflector as in Claim 4 wherein said lens defines a focal surface represented by a locus of focal points for beams of light illuminating said retro-reflector from a range of directions of at least ± 60 degrees.

Claim 11 (withdrawn) The retro-reflector as in Claim 4 wherein said modulator is positioned between said lens and said mirror element and is movable with respect to the lens and the mirror element and further comprising:

- A) a tracking device for tracking a source of interrogating light beams at an interrogating location,

- B) a modulator position control means for positioning said modulator across an interrogating light beam from said source, and

- C) a modulating means for modulating said modulator to impose signals on said interrogating beam to permit communication from said retro-reflector back to the interrogation location.

Second Claim 11 (cancelled)

Claim 12 (amended) The array of retro-reflectors as in Claim 13 wherein all but one of said retro-reflectors are tilted with respect to one un-tilted retro-reflector.

Claim 13 (new) An array of retro-reflectors each retro-reflector defining a clear aperture, and each of said retro-reflectors comprising:

- A) a housing,
- B) a compound lens attached to said housing, said lens defining a focal surface represented by a locus of focal points for beams of light illuminating said retro-reflector from a range of directions of at least ± 20 degrees,
- C) a mirror element having a reflective surface co-located with or approximately co-located with said focal surface,
- D) a modulator positioned so as to modulate light beams from an interrogating light source located at an interrogation location and a modulating means for modulating said modulator to impose communication signals on said interrogating beam to permit communication from said retro-reflector back to the interrogation location.